The background of the entire page is a monochromatic red. Overlaid on this background are numerous thin, vertical stalks of grass or wheat, also in red, creating a textured, field-like effect. The stalks vary in height and are slightly out of focus, giving a sense of depth.

Grain

JULY, 1944

Suggests Car Unloader "Chair"

Regarding new methods for unloading grain faster and cheaper than currently, what about the proposition for all the SOGES member houses to set up a fund in proportion to the number of unloading pits they have—a decent fund in size—turning same over to the best brains in the country?

Remember these are only 10c to 15c dollars in this day and age—provided fund could be set up, as it righttun, should be, as an expense.

Or what about forming a corporation in order that the benefits will accrue only to subscribing members? Let's hear some discussion on this.—Harold Wilber, Decatur.

Enrollments Remarkable

Enrollments in Federal, State and local training programs authorized by Congress as a means of providing war production workers with necessary skills have totaled more than 12,000,000 in less than 4 yrs and have advanced to a remarkable degree the home-front "battle of production," according to Paul V. McNutt. The heaviest training loads were carried by trade and vocational schools and by the Food Production War Training program.

What workers have the best War Bond records, those who work every day or the absentee champions?

SIX DIE IN GEORGIAN BAY BLAST

Outside of the regrettable loss of six lives, the dust explosion occurring in the steel constructed million bushel Aberdeen elevator at Midland, Ont., on July 8th did little damage other than to vent itself through the metal clad siding. The blast was heard throughout the city and "sent debris flying over the yard and out into Georgia Bay," according to one correspondent.

"The explosion was followed by a flash fire, which spread quickly throughout the entire superstructure, starting small fires at a number of places. The headhouse was a mass of flames when firemen arrived, however there was little to burn." Only clue as to the cause is contained in the report that "William Wilson, in charge of the dust-burning hut attached to the elevator, escaped unhurt although he was covered with dust and struck by flying debris." Sweepers were busy at the time of the blow-up.

Dust Explosion Wrecks Plant

Fire completely destroyed the Kasco Mills feed manufacturing plant at Waverly, N. Y., on June 30th, causing a loss estimated at \$350,000. A dust explosion is believed to have ignited the blaze.

Pea Flour Dust Dynamite

According to preliminary tests made by the U. S. Bureau of Mines, pea flour dust, which commodity some grain plants are now preparing for war and domestic use, is more potent from the explosion standpoint than even corn starch dust—the most dangerous of the lot so far.

1944 Edition Ready

The 1944 edition of the Dust Explosion Hazards codes is available in book form from the National Fire Protection Ass'n, 60 Batterymarch St., Boston, in cloth binding at \$2, paper \$1.00.

Suggests Trading Post

Did we ever try a "Trading Post" for those who have to sell any surplus machinery and equipment—and for those who may be in need of something?—Harold Wilber, A. E. Staley Mfg. Co., Decatur.

[Ed.: Perhaps the time is more opportune for launching such an idea today than ever before. Some have used our classified ad service, but we'll go along with a Trading Post. The added "flavor" may prove popular. So send them along without delay.]

Not Wild

"Son, who is this wild woman you are running around with?"

"Aw Dad, she ain't wild. Anybody can pet her."

COTTON DUCK HAS GONE TO THE FRONT!



—and, therefore, your deliveries of belting for the third quarter may be disrupted.

Here's how: The belting industry faces a shortage of duck caused by the Armed Forces' enormous needs, greatly augmented by the liberated areas' requirements, which will expand as our invasions progress.

Sufficient raw materials are on hand to process current requirements but the latter part of the third quarter will be very critical. Survey requirements — order now!

IMPERIAL BELTING COMPANY
1750 S. KILBOURN CHICAGO 23, ILL.

Handling It PNEUMATICALLY

By WILLIAM LITTLEJOHN PHILIP
Eminent English Engineer

*Prepared for Presentation Before the
Society of Grain Elevator Superintendents*

THE methods of dealing with the discharge of grain ex-ship, in countries where grain is imported, involve problems which in exporting countries are largely non-existent, and for that reason the Pneumatic System of discharging grain ex-ocean ship has become prominent in Great Britain and the Continent of Europe, and from some points of view is of considerable interest.

This system of grain elevating and conveying by Pneumatic Plant is to a large extent a British invention, but little progress was made either in Great Britain or on the Continent, towards making it of practical use until the late Mr. F. E. Duckham of the Millwall Dock Co., London, used an adjustable sleeve at the end of the intake pipe for regulating the amount of air entering the pipe to obtain the proper mixture of grain and air. This enabled him to construct a fairly successful Pneumatic Plant about fifty years ago.

For a number of years after that comparatively little advance was made, but since then British and Continental Engineers have turned their attention to this method of handling grain, and in a lesser-degree other materials, with the result that progress has been continuous. This is evidenced by the fact that while the power consumption on Mr. Duckham's first plants was in the region of 3 hp. per ton of grain discharged, on plants recently installed the consumption has been brought down to 0.75 hp.

Very Low Mechanical Efficiency

THE Pneumatic Grain Elevator is admittedly an appliance of very low mechanical efficiency, but its advantages in a good many cases outweigh this disadvantage, and in Europe it is superseding the Bucket Type Elevator which has been in use for so many years for the discharge of grain brought by ship from overseas and for taking in grain from barges. It is also used for conveying granular materials in buildings and sheds where, owing to the arrangement of the buildings or the presence of existing plant, it is difficult or impossible to install mechanical conveyors or elevators, a pipe line occupying little

Long the outstanding authority throughout the world on the bulk unloading of grain and grain products, William Littlejohn Philip prepared this treatise on "Pneumatic Handling of Grain" at a time when he hoped to be able to deliver it personally. An Honorary Member of the Superintendents' Society, a distinction accorded him for his meritorious achievements, his contributions towards the furtherance of mechanical perfection to our Industry become increasingly obvious as one delves further and further into his descriptions—which should prove so helpful at the present moment when bulk unloading is everyone's Number One headache.

space and being capable of deflection to pass round or over obstacles.

The reasons why the Pneumatic Elevator is superseding the Bucket Elevator in certain situations, especially for the discharge of grain from ocean ships, will be clear from the following considerations. In discharging grain by means of a Bucket Elevator, the Elevator is lowered into the grain and gives its maximum output as long as the boot of the Elevator can be kept in the grain or fed sufficiently by the aid of power shovels or hand labor, but when the body of grain is shallow, or is in parcels, the cost per ton discharged is increased and the rate of discharge is lowered.

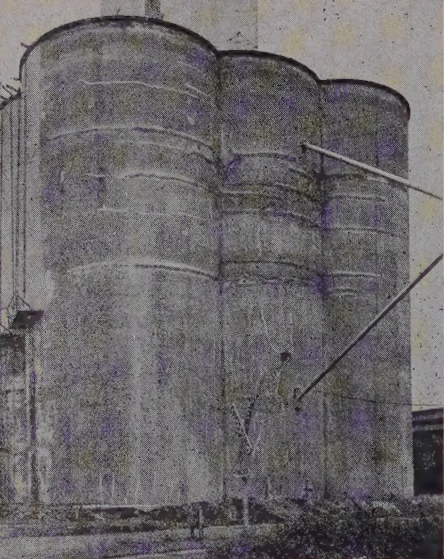
In the case of a Pneumatic Plant having a rated capacity of say 250 tons (8,133 bus.) of wheat per hour, four pipes each with a nozzle attached to the lower end are generally adopted, the lower lengths of pipe being flexible so that the nozzle can be easily moved about in the hold and reach the grain in any part of it, thus maintaining an excellent average ca-

capacity. By additional lengths of flexible piping the nozzles can be worked in awkward positions between decks and can also be carried a considerable distance fore and aft from the edge of the hatch coamings, reaching parts which cannot be dealt with by Bucket Elevators except by bringing into use power shovels and other trimming devices.

Eliminates Trimming

THE Pneumatic Plant is of great value in unloading grain which has been shipped in shallow parcels, the latter being separated in the ship by tarpaulins, or savealls. In the case of a cargo of this description the Bucket Elevator is difficult of successful operation and has to be worked with great care, owing to the risk of the boot breaking through the separation sheets and causing different parcels to become mixed. In many cases the whole of each parcel would usually have to be trimmed to the Elevator boot, and as the surface of the separation sheets between the parcels is

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THE above unusual picture reveals the infinite care with which The Merchants Elevator at Davenport, Iowa, owned and operated by the Victoria Elevator Company of Minneapolis, Minn., is being thoroughly restored to 100 per cent usefulness — every inch of storage space soon will again be safe and sound for income-producing storage. Several interesting stages in the complete restoration process are visible, including the "flesh grafting" over the "cancers" that have been cut out, the caulking, and the penetrating primer coat. Particular skill in these operations is highly desirable in order to give the tanks just the right flexibility for future expansion and contraction without further breaks at old "sores."

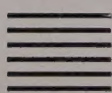
At the right is shown the restoration work just completed. This section of the 1,000,000 bushel elevator now is as weather-tight as anyone could hope for—and your plant and your grain can be equally well protected.

IT'S THE OLD, OLD STORY:

≡ "A STITCH IN TIME"

..... Saves more than the proverbial "nine," as the old axiom goes. For "cancers" in concrete are no different than any other "cancers." Put the knife to them just as soon as they're discovered and you save one whale of a lot of future costly "operations." "A Stitch In Time Saves Nine," true. But more important,—it helps insure the condition of your stored grain,—and how costly that can be when it goes on a rampage. In everyone's past experience there's one or more "black pages" in his memoirs—weeks when the fight with grain spoilage was nip and tuck. You don't NEED to dread any such a recurrence because of the weather now.

Take that "STITCH" in time, TODAY. There are no priorities on our proven materials; your government wants every inch of space in existence, and restoration work of this nature had better be done now while it is still possible to get skilled artesans to assure you the kind of work you get from.....



JOHN D. BOLTON COMPANY
20 N. WACKER DRIVE *Gunitite Contractor* CHICAGO

seldom level, trimming is a troublesome operation.

A Pneumatic Plant, on the other hand, is an ideal appliance for dealing with this kind of cargo. The nozzles may be lowered right down on the savealls without the danger of damaging them, and can also be moved about the whole area of the parcel. Very little trimming is thus required and as the nozzles can be kept in the grain during nearly the whole time of discharge, a good average capacity can be maintained.

Another important advantage of the Pneumatic Plant, is that it is very much cleaner than the Bucket Elevator. When a Bucket Elevator is in use the men in the hold are often working most of the time in an atmosphere densely charged with dust, particularly when Indian Wheat is being discharged, whereas with a Pneumatic Elevator in use the dust is removed with the grain and the atmosphere is clear.

Weather Not Factor; Condition Restored

THE advantages of the Pneumatic Elevator may be summarized as follows:

1. The number of men required to operate a Pneumatic Plant at good average capacity is less than that required for a Bucket Elevator and the men working in the hold are more efficient in a clean atmosphere.

2. The pipes can be swung into the ship's hold and discharge started very quickly, and in a cargo awkwardly disposed—and where the Bucket

it is often impossible to lower a Bucket Elevator, can easily be dealt with, and the pipes of a Pneumatic Plant can be passed through a comparatively small opening in the hatch and yet reach a large area, which is a distinct advantage in wet weather.

4. In the case of grain which is damp or slightly out of condition after the voyage, its passage through the Pneumatic Plant materially assists in restoring its condition due chiefly to the drying effect of the air and the breaking up of clotted masses while passing through the pipes.

5. Another very important feature is that when a ship has general cargo and grain in the lower holds, the general cargo can be landed on the quay and a Floating Pneumatic Plant used at the same time on the off side to discharge grain from the lower or other holds into coasters or barges.

Describes Construction

The principal disadvantages are first cost, and power consumed.

The vacuum upon which the system depends is produced either by a Rotary Exhauster or by a Reciprocating Pump and the cycle of operations in a typical Grain Plant can be readily understood.

An exhausting unit, either Rotary or Reciprocating, is connected to the top side of a Receiver, the grain carrying pipes with nozzle being also connected to the latter but at a point near the bottom. The grain and air enter the Receiver at this point and as the Receiver is of large diameter compared with the diameter of the

the outlet at the top, which is connected to the Exhauster. The bottom outlet of the Separator is connected to the conical bottom of the Receiver and the dust from it is led by means of a suitable shoot into a Grain Discharger or is fed out by means of a small Rotary Dust Discharger to a hopper under the Grain Discharger.

An additional cyclone type Separator and Dust Discharger may be used between the Receiver and the Exhauster. In the case of a Plant installed in a Mill and dust may be fed into a separate receptacle from which it may be sacked off as it accumulates, thus effecting a partial cleaning of the grain in the process of intake.

Short Stroke Verticle Reciprocating Pump Best

EITHER a Rotary Exhauster or Reciprocating Pump is quite suitable for the work, but in certain details of working they differ, as in connection with the Turbo type. When the nozzle is withdrawn from the grain or its mouth is only partially immersed in the grain, a free influx of air is allowed to the suction, causing a very heavy overload to be thrown on the motor and driving gear, involving a regulator either to reduce the speed of the motor, automatically in the case of a direct current electrical supply, or to automatically throttle the influx of air to the suction branch of the Exhauster by means of a butterfly valve, in the case of an alternating current supply.



Elevator can only reach a small portion of it, the Pneumatic Elevator can directly reach every portion; moreover, in a cargo composed of small parcels of grain separated by sheets, in which a Bucket Elevator is not very satisfactory, the Pneumatic Plant can deal effectively and rapidly with the whole cargo.

3. By virtue of the flexible piping, poop and bunker hatches, into which

pipes, the air on entering loses its velocity and the heavy grain consequently falls to the bottom, the air being exhausted as slowly as possible through the pipe at the top which is connected to the Exhauster.

In the best practice the Receiver is of a diameter sufficiently large to allow a cyclone Dust Separator to be fitted inside, the air being drawn through this Separator on its way to

In the case of the Reciprocating Pump, however, the load upon the driving gear is always directly proportional to the vacuum and to the work being done. For this reason the Reciprocating Pump is the most economical for general use, the horse power per ton of grain lifted by a Plant with Pumps varying according to the arrangement from 0.75 hp. to just over 1 hp. in a well designed

Plant, while the power required on a Turbo-Exhauster Plant fitted with automatic control would average about 1.5 hp. per ton. The type of Pump universally adopted is the short stroke vertical Reciprocating Pump, as it has been found to be most suitable for this class of work.

The valves in the Reciprocating Pumps vary in diameter according to the size of the Pump, and as many as possible are fitted in the space available in order to reduce as much as possible the velocity of the air passing through them. They usually consist of mild steel plates about 3/32" thick with a leather disc 1/8" to 3/16" thick rivetted one on each side with copper rivets.

Leather Covering Saves Discs

THESE leather coverings save the steel discs from the hammering action of opening and closing, which would otherwise tend to damage them. Sometimes, however, valve discs are used made of specially hard steel without leather protection, but the leather covered valves are usually considered to be more satisfactory.

The clearance between the piston and the cylinder covers should be as small as possible and in the largest size of Pumps this is about 1/8" at the top side and 3/16" on the bottom side.

The Receiver is simply a cylindrical tank constructed of steel plate stiffened with angles and fitted at the top and bottom with conical ends. In the latest and best practice a cyclone is fitted inside for removing the dust from the air before it passes through the pipe from the top which is connected to the Pump or Rotary Exhauster.

The grain which has been deposited at the bottom of the Receiver is fed out from the latter by means of a Discharger. This appliance is required to discharge the grain without reducing the vacuum in the Receiver, and may be of the Rotary Type, the oscillating type, or the type shown, the grain being free at this point to pass into a Weigher or into the Granary Elevators or Conveyors.

The Grain pipe line usually consists of one or more hinged pipes connected to the Receiver at one end and fitted at the other with a right angle bend to which the vertical pipes are attached. These pipe lines are usually attached at the Receiver end to an airtight universal joint which may consist of a specially constructed ball joint mounted on a horizontal swivel, or of a forked universal joint.

Looks Perfectly Simple

A WINCH is fixed for raising and lowering the pipes in order to get them easily into and out of the ship or barge, and to lower them so that the nozzle on the end of the pipe line may follow up the level of the grain as it sinks during discharge. It is usual to fix a flexible pipe immediately

under the right angle bend already mentioned and at least one other immediately above the nozzle.

The right angle bend, as will readily be seen, must be of robust construction and should be fitted with a heavy renewable plate on the back, as a great deal of wear occurs at this point due to the velocity with which the grain impinges on it in its passage to the Receiver. Although, as mentioned above, it is usual in the larger Plants to fit the Receiver end of the grain pipe line with an universal joint of special design, in small plants where the vertical movement of the pipes is not great a flexible pipe of robust construction may be used, as illustrated.

With regard to the nozzle, there are three forms of this appliance. The straight nozzle is one commonly used for sinking in bulk grain and is very efficient as long as the grain runs freely to it. The angular type is chiefly used for work between decks and where the pipe has to be led in a more or less horizontal line, while the third type is very efficient for cleaning up purposes or for use when dealing with shallow parcels of grain.

It will be seen that the nozzle consists in the first two cases of a central tube having an adjustable bell-

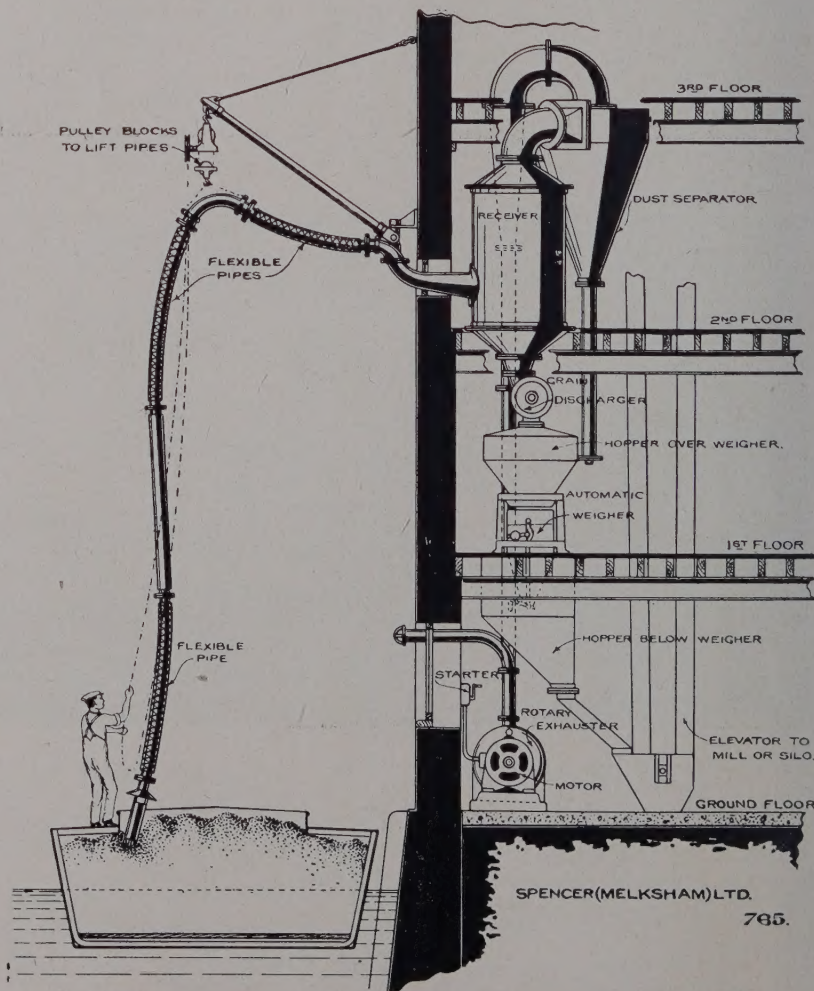
mouthed end and an outer sleeve which forms a passage for the admittance of air. The cleaning up nozzle is simply a curved tube the lower end of which is enlarged and an air inlet chamber provided with a valve for regulating the amount of air admitted.

Two types of flexible pipe suitable for use on Pneumatic Plants consist of end tubes connected by a series of tapered steel sections fitting one into the other, the whole being covered with an outer sleeve of india rubber and canvas or several layers of proofed canvas.

Verticle Height Governs Vacuum

IN a typical grain discharging Plant in which the vertical lift of the grain is about 100 feet and the length of the horizontal pipe is about 40 to 50 feet, the vacuum required to lift North American Wheat at full capacity would be about 10 inches mercury gauge at the Pumps on a Reciprocating Pump Plant, and about 11 to 11½ inches mercury gauge in a Turbo-Exhauster Plant fitted with dust filters of the fabric sleeve type.

In dealing with oats and other lighter grains a vacuum of 6 to 7 inches mercury gauge would be suf-



ficient, the vacuum being varied as required by varying the amount of free air entering the pipe system at the nozzle.

The vacuum required is, of course, dependent mainly on the vertical height through which the grain requires to be lifted, but for the lift mentioned the figures given are good averages.

In lifting grain to the Receiver it is necessary that the air should have a suitable velocity for accelerating the grain sufficiently to raise it the vertical height required and keep it in suspension during its transit along the horizontal or nearly horizontal pipe to the Receiver.

In order to accomplish this, free air usually enters the mouth of the nozzle at a speed of about 70 to 80 miles per hour in the case of a Plant working under a vacuum of about 10 inches mercury gauge. It should be understood that this vacuum represents the pressure at the suction branch of the Pump or Rotary Exhauster, and is not maintained throughout the whole system. For a vacuum of 10 inches mercury gauge at the Pump in an average Plant, the vacuum in the Receiver would be approximately 9 inches and would vary fairly uniformly from this figure to a comparatively low vacuum just above the nozzle.

Pipe Diameter Increases Gradually

IT will be obvious that the volume of the free air drawn in at the nozzle increases in proportion to the increase of vacuum in its passage through the pipe system, and consequently the diameter of the grain piping must be increased gradually in order to keep the velocity of the air at a suitable rate for the work required of it at each portion of the Plant.

It is also desirable at this point to note that the air and grain do not travel with the same velocity, the velocity of the grain as might be expected being considerably less than that of the air which is lifting it. The grain is very rapidly accelerated from rest but slows down as it proceeds up the vertical pipe.

The volume of air aspired by an Exhauster unit having the length of piping used in Plants such as are illustrated is approximately 50 to 52 cubic feet per minute per ton of grain lifted per hour, giving a ratio of grain lifted to air aspired of approximately 1 to 63 to 1 in 65 by volume.

Several actual examples of Plants of recent construction may be of interest. Shown are several typical Floating Pneumatic Elevators in use at the Liverpool Docks. This Elevator is built on a steel pontoon 86 ft. long by 36 ft. beam and 12 ft. deep. The pontoon is divided into compartments by watertight bulkheads and below deck contains the Vacuum Pumps of the type shown, a vertical compound condensing steam engine



A CENTURY ago Uncle Sam had nearly 1,500 million acres of unsettled land.

It wasn't worth much. What could be sold at all brought an average price of only 9¢ an acre.

It took weeks to get to it. It cost a young fortune to bring in supplies. There was no way to market crops profitably.

What was needed was good transportation.

To help finance the construction of some of the pioneer railroads into this virgin territory, the government turned over to them 130 million acres of land.

In return, most government traffic was to be carried at 50% off.

The railroads were built. Frontiers were pushed back. The soaring increase in the value of land retained by the government far more than compensated for the lands granted the railroads. Tax revenues on all the land multiplied.

For nearly a hundred years, the government has reaped an additional and ever-growing advantage from greatly reduced rates. Not alone from the few railroads which received land grants (about 9% of the trackage), but from competing roads as well.

Through these reductions alone the government has been repaid many, many times. At the rate of government shipping today, the deductions amount in a single year to just about twice the value of the grants when made.

Under present conditions, these land-grant deductions are both discriminating and unfair to shippers who do business with the government but who cannot use land-grant railroads.

This is one reason shippers, farmers, the Interstate Commerce Commission, the Office of Defense Transportation and the National Association of Railroad and Utilities Commissioners join with transportation agencies in recommending that land-grant deductions be ended.

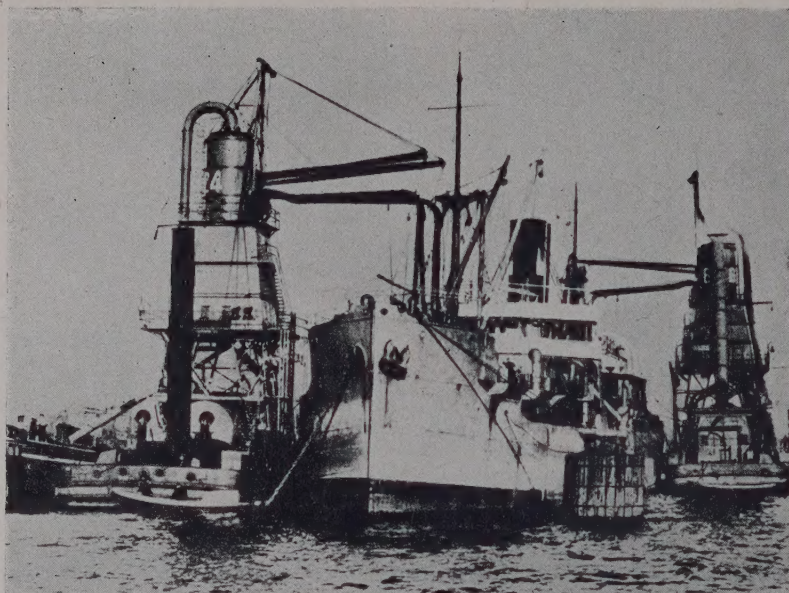
AMERICAN RAILROADS
ALL UNITED FOR VICTORY



If you would like to know more about Land-Grant Rates than we can tell in this advertisement, we will send you free a comprehensive booklet about them. Just mail this coupon to Association of American Railroads, Transportation Bldg., Washington 6, D.C.

NAME _____

ADDRESS _____



for driving them, complete steam plant and steam driven dynamo, etc. Above deck the Plant is carried on a steel superstructure.

Got Idea from Pretzel Factory

IT will be seen that the Plant is arranged with weighing machines in the superstructure and that the grain can be delivered out by means of shoots to barges or coasters moored to the side of the pontoon opposite to the side of the ship from which grain is being discharged. A hinged Band Conveyor is mounted on the superstructure on the same side as the grain intake pipes so that the grain may be delivered, if required, across the deck of the ship to the quay. This Conveyor is arranged so that it can be raised or lowered vertically and when not in use is hinged back against the superstructure.

The grain pipes are suspended from steel tubular booms which can be raised or lowered by means of a winch with a barrel for the rope from each boom. The height above water level of the top of the mast carrying the sheaves for the ropes is about 100

feet and the grain pipes are arranged with a range suitable for working in the largest grain carrying vessels entering the port. The capacity of this elevator is 250 tons of wheat per hour.

A typical Traveling Pneumatic Plant recently set to work at the Port of Leith for discharging ships at the rate of 150 tons per hour is also illustrated. It is mounted on four bogies each with two heavy cast steel wheels, the wheels of two of the bogies being driven by gear and the chain drives from a motor situated on the first floor. The Vacuum Pumps, also situated on the first floor, are motor driven and provided with a heavy flywheel to steady the drive, the whole unit being balanced so that vibration during working is negligible. The grain from the plants is fed out by means of shoots to a Band Conveyor in a tunnel under the track on which the elevator travels.

These plants are fitted with Turbo-Exhausters instead of Pumps and are fitted with sleeve filters for removing the dust from the air in its passage from the Receiver to the Exhauster.

The grain in this case is delivered from the Traveling Plants to Band Conveyors carried in an overhead gantry, which convey it to the warehouse shown.

Creams No Dermatitis Cure

From all information available I do not believe that protective creams are the answer to dermatitis. In most cases of dermatitis due to dust exposure the dermatitis results from the inhalation of dust causing a systemic disturbance which is reflected in eruptions of the skin. Thus the only answer to this problem is engineering with a view toward removing the dust from the air.

If this is impossible then those workers who are so affected should be removed from the dust exposures until the dermatitis is cleared up. They should then be re-exposed and if the same condition arises they should be permanently taken away from any areas where they might be subject to dust exposure. In other words, authorities contend that dermatitis due to exposure to dust is an allergy and protective creams are not the answer to the problem.—V. L. McMullen, The Clinton Co., Clinton, Ia.

As far as our experience is concerned we have found that the matter of cleanliness has about 99% to do with dermatitis. However, there are occasions where some employees may be allergic to certain dust and oils but in the main if the employee is particular as to cleanliness there will be no trouble with dermatitis.

As to the matter of using protective creams I do not consider them of much value due to the fact that employees will not use them unless they are continually followed up and then frequently they are used with an unclean skin and have a tendency to do more damage than good.—Harry J. Aldrich, Spencer Kellogg & Sons, Inc., Buffalo.

Statistics show that 80% of all people suffer from either tooth decay or pyorrhea. The American Dental Association reports that among our youth an average of 6.8 fillings are needed.



68 Steinlites in Stock

Others coming through fast. Immediate shipments on orders placed now. 10-day free trial. No money down. For testing moisture in whole grains and related products, the

one-minute electronic Steinlite is most popular . . . more extensively used than all other electric moisture testers combined . . . fast, accurate and easy to use.

Seedburo is headquarters for all grain and seed house supplies. Write for catalog.

626 BROOKS BUILDING

CHICAGO 6, ILLINOIS

SEEDBURO
EQUIPMENT COMPANY

SEEDING QUALITY
Genuine SEED TRADE
REPORTING BUREAU
FOUNDED 1912

Sprinklers Vs. Explosions

The development of quick acting (fog type) sprinklers has been rather recent and a number of installations have been made in munitions plants. I am not certain that they are capable of preventing the propagation of dust explosions after flame travel has started, but it may be possible to provide such protection at strategic points where ignitions or primary inflammation of the dust may occur.

Tests of the kind you suggest are on our program to be taken up wherever we can resume our testing work. At the present time inspections, investigations and emergency tests take first place. . . . I am hopeful that Dr. Nuckolls of the Underwriters Laboratories will be able to obtain some information with his newly completed dust explosion testing bomb-cylinder which will supplement laboratory data obtained in smaller apparatus. It seems quite probable that he will be able to obtain worth while information on the effect of the size of the dust cloud and conditions which follow the original inflammation of the dust particles immediately surrounding the source of ignition.—Hylton R. Brown, Senior Engineer, Bureau of Mines, U.S. Dept. of the Interior, College Park, Md.

Fire Losses Keep Mounting

With the absence of continuous spectacular plant losses this year compared with many previous years' one is disposed to feel that the necessity of constant vigilance has passed—that perhaps the fire bug is biting other industries now and won't come back.

An examination of the record just received from the National Fire Protection Ass'n reveals that there has been no let-up in medium sized fire losses, which rapidly add up to many fold the big loss figure,—to wit:

Mar. 17—Soybean plant and elevator, Mexico, Mo., \$160,000 loss;

Mar. 23—Grain elevator, totally destroyed, Lincoln, Nebr.;

Mar. 27—Feed mill and grain elevator, Wilson, N. Y., \$110,000;

Mar. 29—Feed mills at Cheraw, So. Car., \$143,000;

Apr. 1—Grain elevator, fire and explosion, Elwood, Kan., \$189,734;

Apr. 19—Feed mill, from welding torch, Woburn, Mass., \$175,000;

May 2—Corn drier unit, loss seed corn, Delaware, O., \$100,000;

May 14—Soybean plant, four stories, Taylorville, Ill.;

Here in but three months there is over a million dollars lost. The fire bug hasn't been swatted yet.

Where Are They?

Polly: Whatever became of those old-fashioned gals who fainted when a boy kissed them?

Dolly: Huh! Whatever became of the old-fashioned boys who could make 'em faint?

Skid-Proof Floor Spray

"Griptred" is a newly developed product of the Goodyear Tire & Rubber Co., Akron, especially developed for spraying or brushing on wood, tile or concrete floors wherever a slip hazard exists. Wet surfaces are made just as skid-proof as dry ones.—E. B. Kellogg, International Ass'n of Milk Dealers.

Oil Kettle Causes Blaze

A 450 gal. kettle of linseed oil sprung a leak and spilled its contents on the oil burner heating same in a Minneapolis linseed plant recently. Five employees were forced to flee the blaze.

Mary Had a Little Wolf

Mary had a little wolf,
He had a name: Inflation;
And every time she bought a dress
Poor Mary's situation
Became a little worse because
A part of every dollar
Had to go to feed the wolf;
He soon outgrew his collar!
The more she spent, the more he ate,
She simply couldn't beat him—
Until she started buying bonds
And found he couldn't eat 'em!

Wanted to Come from Australia

Sydney, Australia, May 12—Noticed on Page 18 of the February issue of "GRAIN" a picture of James Auld. It was most unfortunate that I had not received it a few days earlier, because I could then have shown it to a certain U. S. citizen who would have been most interested.

From the same "GRAIN" it is noted that the SOGES convention is set for Chicago, to commence June 15. It is improbable that this letter will reach you before then, but I would indeed be pleased to be in Chicago, particularly on those dates.

Although another visit to Chicago is being anticipated, it may not become a reality as these difficult times upset all our calculations. At some future date it may again be possible to give you some of our news, those portions of it in any case which might be of interest to you, but that time is not yet.

Please give my very best regards to any of your people who may remember me.—L. S. Harrison, Wheat Commissioner and Manager, Government Grain Elevators.

Investigation Committee Successful

One feed manufacturing concern reports excellent results from an Accident Investigation Committee. All of the faults of poor management, hazards, etc., are brought out and presented to the foreman in detail. The knowledge that A-L-L accidents are going to be thoroughly investigated tends to make the foreman more safety conscious.

Put On A Good Week

Fire Prevention Week is scheduled for Oct. 8-14th, according to Paul Christensen of Van Dusen-Harrington Co., Minneapolis. "Advance planning is essential to secure an effective observance," he says.

The Nazi agency, DNB, reports the number of "foreigners" employed in German industry increased from 500,000 at the beginning of the war to 12,100,000 at the end of May. The DNB dispatch said the figure includes prisoners of war but does not include "masses of foreign labor and prisoners of war employed outside the Reich territory."

Gus Baade Dies

Gustave Carl Baade, born July 10, 1875 in Clayton country, Iowa, passed away on July 19th at the Burlington (Ia.) hospital.

Gus Baade came to Burlington in 1923 as superintendent of the Trans-Mississippi grain elevator, having acted in that capacity for Holmquist Elevator Co. in Omaha. He was retained by Barlett-Frazier and Norris Grain companies when they in turn took over and operated the properties. He retired a year ago because of ill health.—Sam P. Fears, Burlington.

(Well known to SOGES convention delegates, Gus joined the association in its earlier stages, holding membership number 75 issued April 2, 1931. He took an active part in the Society's affairs; was at one time a director and frequently a committeeman until 1939.)

Easy to Tell

Victory Gardener: How in the world do you distinguish between vegetable plants and the weeds?

Old-Timer: Easy. Just pull them all up, and the ones that come back are weeds.

HIGH CAPACITY GRAIN CLEANING EQUIPMENT for TERMINAL ELEVATORS!



NEW PRIORITY-RATED
EQUIPMENT AVAILABLE
FOR ESSENTIAL NEEDS

Hart-Carter normally offers a complete line of special, heavy-duty cleaners for terminal elevators. Included are the 2564 Carter Disc-Cylinder Separator, combining discs and cylinders; and the all-cylinder 45 Hart Uni-flow Grain Separator. These machines offer a profitable answer to whatever cleaning, grading, separating or processing jobs you may be called on to handle.

HART-CARTER COMPANY

670 Nineteenth Ave. N.E.

Minneapolis, Minn.

WHITE COAL

in the Modern Grain Elevator

By J. H. IRWIN, Manager

Western Grain Co., Ltd., Fort William

Before Society of Grain Elevator Superintendents

In addition to being local Manager of this important Grain House, Mr. Irwin was for a number of years both a member and chairman of the Fort William branch of the Hydro Electric Commission. Obviously few grain plant operators could have occasion to know more about this important subject than Author Irwin gives you in this humorous article, interesting to the very end.



MODERNIZATION is the keynote of the present age, but a short resumé of the application of power in the past is quite in order so that we may fully appreciate the present white coal—man's greatest servant of the present time.

The first country elevators were operated by gear and pinion power sweeps, with each horse usually working four to five hour shifts alternately. A true "one-horse" power unit—only two horses were necessary to provide steady operation. Often the horse was blindfolded to insure his steady plodding round and round while the agent was attending to other duties.

Steam Unit for Expert Agents

THEN to the more expert agents a small steam unit was provided, truly an improvement, yet due to necessary care, far from being as simple or fool-proof as old reliable "Dobbin."

Time produced the heavy-duty gasoline engine with the make and break ignition, which when once started gave a fairly steady and reliable power unit, but requiring patient, constant attention.

All three types of power were applied to the legs by boot or bottom drives, with the result that the

heavier the load the less the friction on the boot pulleys to drive the legs. No operator who was initiated into the terminal elevator business through the medium of the old-time country elevator, but who well remembers the many anxious and strenuous times caused by "Dobbin" slowing up, or the steam going down, or the gas engine easing up for no apparent reason.

Then he hollered for someone to shut off the load and he, the air blue with audible and silent profanity, tried to keep the leg still elevating to avoid having to remove the possible choke in the boot where usually the boot pit was deep and cramped. Or, on the other hand, he at times had many farmers' wagons waiting to be unloaded because the gas engine refused to respond to coaxing, cajoling or condemning to perdition; or had customers wait while he got up steam.

Mellow Disposition Reveals Apprenticeship

TO those who have missed these grand and glorious experiences, I can only say they have missed much in their lives to develop a mellow disposition so essential in an elevator operator's make-up. On the other hand, happy were the oldtime agents who had run the gauntlet of horsepower sweeps, steam and gas engines, when they were finally located in a district where electric power was available and rope drives to leg-head or motor with chain drive insured steady, reliable, 24-hour power by the throwing of a switch or auto-starter. No time to start, less to stop, no customers waiting for attention—a real country elevator operator's paradise.

To the terminal elevator operator of an electrically powered plant, where machinery is individually driven and ever-increasing improvements make operations more efficient and economical, congratulations are in order.

Do we realize what white coal, coupled with modernization, has blessed us with? "Electricity in the Modern Grain Elevator," means no steam boilers to keep cleaned and in repair. No suitable water supply to provide. No coal storage space and fuel supply to occupy valuable property. No smoke to mar the beauty of the structure—which becomes dirty looking all too soon. No waiting to get steam up. No multiplicity of main and line shafting with clutches, rope, chain and belt drives to maintain.

Today our plant is started and stopped in short order. Only the machinery required is operated, and power interruptions in most vicinities are an almost forgotten inconvenience. Many plants maintain a peak of 60% of their connected load, and at times take advantage of the 25% drawback on their peak as a minimum. Today's prevailing power contracts here are on basis of:

\$1.00 per month per hp. service charge—20 minutes peak.

1.6c for the first 50 kw. hours consumption.

.9c for the next 50 kw. hours consumption.

1c for the balance of the consumption with a 15% discount for 22,000 volt power and a further 10% discount for prompt payment within ten days of billing date with 90% power factor.

25% to 50% Reduction in Peak

WHERE in times, due to lack of business, peak at 75% minimum or less can be established for 11 consecutive months, a new peak is granted—a concession to some plants enabling a reduction of 25% to 50% in peak with resultant saving in costs.

These rates are a 4.68% reduction as compared to previous rates in effect where the first 50 hours was at 1.75c per kw. and second rate 1c for next 50 hours. Even in spite of these cheap rates, in 1928 elevators in Port Arthur were granted an 8½% rebate and a 20% rebate based on 1936 billing.

Owing to the predominantly low load factor in terminal elevators, cost per hp. and consequently per bushel ranges from \$12.84 to \$18.85 per hp. and from .157c to .239c per bushel handled, on actual power peak and paid for. Actual cost per kw hour used ranges from .948c to 2.219c and bushels handled per kw hour from 16.4 to 6.6.

The rate structure giving a third or .1c a kw price lends itself and makes possible the economical application of electricity for heating purposes, small 550-volt air heaters being adaptable to heating the small offices throughout the plant.

For the larger main offices, welfare buildings, inspection and weighing offices, bayonet type immersion heaters installed in hot water or steam heating plants have proven themselves inexpensive, clean, easy of operation, capable of supplying reliable, even heat—and best of all, at a cost less than that of fuel without taking into consideration the labor of firing and the removal of ashes. At the same time the regular heating units are left intact ready for ordinary firing should the electricity not be available without going into the first or second period rate or increasing the peak. Cost of installation, depending on the adaptability of regular heating units, is sometimes expensive but pays for itself in one to two years.

Better Diversity Under Old Rates

IN years gone by before the power companies had much experience in application of rates to elevator loads, some plants enjoyed contracts at \$25 a hp. per year for half their peak load and 1½c a kw. hour for the other half. This did not provide the revenue expected considering the peak held available, although due to the low load factor of 25% to 35% a better diversity was possible than under present rates in effect.

A comparison of rates with other centres on a like load reveals that on a 100-hp. 200 hours use, the head of the lakes pay \$188.99 as against \$189.90 in Toronto, \$206.64 in Windsor, \$238.70 in Winnipeg, \$227.22 in Montreal, \$267.78 in Quebec and \$249.14 in Vancouver.

It is recognized by leading authorities that electricity even at the highest of above centres, far outdistances steam, gas producer, gasoline or Diesel power, in economy, adaptability, ease of application, reliability, and that on present rates the more used the lower the cost per kw. hour—which cannot be said of the other methods quoted. (Electricity is inexpensive because it is widely used and it is widely used because it is inexpensive. A beneficent circle.)

Development and improvement of electrical apparatus has been a real boon to the terminal elevator operators. Motors from the old squirrel type, lending themselves to collection of dust and creating a fire haz-

ard, now are almost totally enclosed and ventilating fans expel rather than collect the dust. Auto-starters formerly with drum type or three point are now of the push button make. The old-fashioned open switch box and fuses are supplanted with enclosed, oil-immersed, overload relays.

Power factor control, always a contentious matter with the power companies, is now made a pleasure by the use of the up-to-date low power consuming static condensers or capacitors, as compared to the synchronous motor, out of which no operating use could be made on account of fire hazard the exciter end created causing its use to be prohibited by the

insurance underwriters from locations in elevator where subjected to usual conditions.

Lightning's Freakish Hazards

TODAY oil type and air gap lightning arresters, never very reliable, are superseded by the electrolytic sure ground apparatus only requiring to be kept clean.

Incredible as it may seem, there are cases on record where lightning has entered our terminals through an open window on the top floor and in finding ground has burnt off the terminals on the back of first floor distributing switch . . . Again in finding ground it ran along a lead-covered, armour-clad feeder cable and set the

YOU CAN

CONTROL WEEVIL
by using time-proven

Larvacide

EFFECTIVELY—because this power tear gas penetrates the grain berry and kills larvae and egg life within.

ECONOMICALLY—because LARVACIDE can be applied to infested grain incoming or in turning, at a cost of only \$1.50/1.70 per thousand bushels, in closed concrete bins.

TREAT GRAIN IN SHALLOW BINS that cannot be turned, with LARVACIDE 15-MIX, by hosing or spraying surface. Cost is low, only \$2.60/2.75 per thousand bushels for corn in good shape—a little more for wheat.

LARVACIDE comes in cylinders, 25, 50, 100 and 180 lbs. and in 1 lb. Dispenser Bottles, each in sealed can, 12 to case. LARVACIDE 15-MIX comes in 50 gallon drums only.

SPACE FUMIGATION for RODENTS

requires only light dosage; kills rats by wholesale. They die on the open floor where most carcasses can be easily swept up for disposal. Write for literature.



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rust on top of cable afire . . . Or where power house lightning arresters, either through failure to operate quickly enough or faulty operation, lightning has exploded the non-voltage-release coils on the main operating feeder switch.

Such incidents only emphasize the importance of checking lightning arresters frequently, especially during season lightning is prevalent and of keeping windows near motors, distributing boxes and overload relays closed in time of storm—as well as keeping all power cables clear of stagnant dust, which otherwise might lead to serious damage to equipment.

A strange case in this district was when a phase on the power company's 22,000 volt feeder line became defective and in seeking ground put a phantom overload on a customer's transformer of a considerable size even though no power was being consumed. This, on the other hand, was a penalty for having too good a ground.

Dismantle Motors; Use Joint Oil Filter

IN the care of motors it has been found good practice and well worth the time and expense to dismantle every motor at least once a

year of normal handling, to replace worn bearings which some times only require switching from one side to the other, to provide a new wearing surface, to repair any worn insulation, and to paint coils at least twice with a good grade of motor varnish.

Most of the plants now have their own babbitt mandrels for the different size bearings and the electrical companies supply the most suitable kind of babbitt of their own compounding at a price usually lower than where purchased from a babbitt manufacturer.

Such treatment insures uninterrupted service except, of course, in case of accident where a motor may have become covered with grain while running or where it may have become short circuited from water or a nail or piece of metal getting in between rotor and stator—but such cases in the modern electric elevator are very rare.

It is also usual to filter the oil in all auto-starters and transformers about every five years to remove any moisture that may have accumulated from condensation. One of the recommendations that came before the S.O.G.E.S. convention in Fort William-Port Arthur was the purchase of a joint oil filter that can be used at

the different plants rather than to have to rent as at present. This suggestion met with the approval of all concerned, but what was done about it?

Lighting Encourages Equipment Care

MODERN lighting has done much to improve working conditions, lessen accidents and better attention to equipment. In addition the use of the daylight or blue lamps permits the grading and shipping of grain at night with a certain degree of safety. It often accentuates certain types of grain or impurities, but by comparison with similar grain shipped during daylight a close uniformity can be maintained.

With the present day high wattage tungsten filament lamp greater care in keeping clean is necessary, for where left to become coated with dust it very readily ignites same—and this again may have far-reaching, hazardous effects. For instance, a light left hanging at the front of an open leg became so coated with dust that it exploded. Part of the light and some of the burning dust flew into the buckets, which, fortunately, were so full of oats that the burning dust fell out again but landed in the leg well just above the ceiling of the first floor.

The next morning nasal indications of burning dust were in evidence. No machinery was started and after much investigation the source was discovered. The next problem was then how best to get it removed. Yours truly, much younger and less experienced than at present, went down the leg on the buckets from the bin floor. With a broom I intended sweeping the burning dust into the buckets opposite and then backing the leg up by hand to where it could be removed at the ground floor.

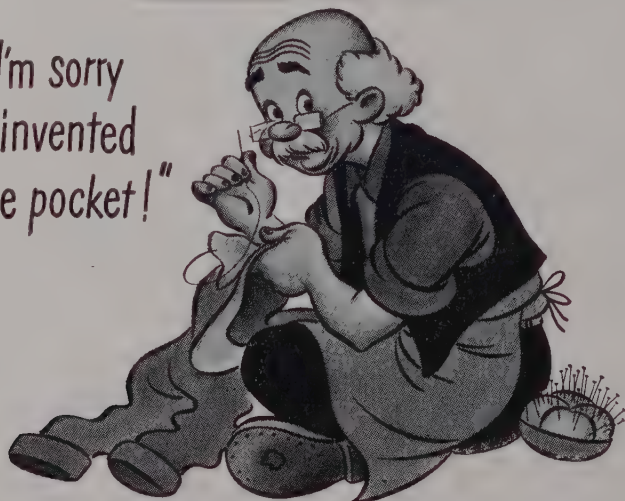
Couldn't Raise An Eyebrow

THE best of plans often miscarry and needless to say at the first disturbance of the burning dust, when it then received a current of air up the leg well, it ascended in one fine flare right up the leg well to the casing at the bin floor. I in turn reached there also as fast as the buckets could be climbed, but minus any eyebrows, eyelashes or hair on hands or head where not covered, and very, very frightened.

Often wonder what really might have happened had it not been in a leg well, where the casing, fortunately, was clean and gave the flare a chance to dissipate without disturbing any other dust . . . The burning dust was later easily put out by sprinkling water on it from the bin floor.

Another instance worthy of mention was where an extension was left in a scale in preparedness to sweeping it out after shipping Refuse Screenings. The garner above was being swept out and by the time the scale was reached no light was on the extension. Later, however, after

"I'm sorry
I invented
the pocket!"



IF I HAD KNOWN that some Americans would be using pockets to hold all the extra money they're making these days, I never would have invented them.

Pockets are good places to keep hands warm.

Pockets are good places to hold keys . . . and loose change for carfare and newspapers.

But pockets are no place for any kind of money except actual expense money these days.

The place—the *only* place—for money

above living expenses is in War Bonds.

Bonds buy bullets for soldiers.

Bonds buy security for your old age.

Bonds buy education for your kids.

Bonds buy things you'll need later—that you can't buy now.

Bonds buy peace of mind—knowing that your money is in the fight.

Reach into the pocket I invented. Take out all that extra cash. Invest it in interest-bearing War Bonds.

You'll make me very happy if you do.

You'll be happy too.

WAR BONDS to Have and to Hold



the scale was cleared it was found that the screenings in the bin where the sweepings went, were afire in several places.

Two pails of water sprinkled on the burning spots, and then gathered up, removed the fire. Just another example of why lights should be used with ordinary horse sense and not exposed to the dusty locations unless covered with a vapor-proof globe—but better still, keep them out of such places, for you cannot see anyway if the dust is so thick. Most important of all keep them clean at all times.

I only tell these experiences on myself in the hopes that they will serve as a warning to some other fellow operator. "Wise are they who can profit from the experience of others." Of course they say: "Advice is what an old man gives a young man when he is too old to set him a bad example." So please accept in the spirit given.

Longer Lamp Life

EXPERIENCE also proves that lamps will give longer life when vibration is at a minimum and explains why some times you notice a knot tied in the cord (if not to shorten it for convenience), but a light spring in bad places is preferable.

Life would be a poor existence if it were not for the faculty of being able to chuckle over some of the experiences, which at the time might have seemed serious, but I recall a funny one of not so many years standing, when on a Monday morning after the power company had been doing some repairs on the Sunday previous, it was found the machinery was all running backwards.

This sure was a conundrum at first—each operator thought some one was playing a practical joke—but to one electrician starting the passenger elevator and having parts of the automatic overrun throw-out come tumbling down from above, it was no joke. The human element is not infallible, and serious might have been the result from changing the phasing had a leg with new type backstop been started.

Though we may be blessed with the most complete and perfect electrical apparatus the best engineers on the North American continent can devise and manufacture, yet its satisfactory operation cannot be assured unless the human factor operating same is eternally vigilant in its duties. In view of the far-reaching effects and the entire dependence placed on an ample uninterrupted source of electricity, it behooves everyone from generating station operator to the assistant electrician who only air-cleans and oils the motors, to do their utmost to recognize the importance of their duties and make electricity in the elevators its own best sales agent to all prospective plants.

How much do you think Hitler's captives would put into War Bonds if they had our jobs?

Delayed Movement Won't Decrease Headaches

This harvest season's delayed movement will, it's true, trim down the volume of each day's inbound cars and spread same over an extended period. That would be fine if the story ended there, but with some 25 million bus of grain stored on the ground in the Southwest a lot of worse headaches will be the price paid for the slower movement. Movement figures for the following weeks reveal:

	1944	1943	1942
July 15	62,536	62,504	51,606
July 8	57,120	54,809	53,509
July 1	58,600	60,479	42,342
June 24	53,333	55,610	44,066
June 15	45,332	49,708	38,946
29 wks.			
(+000) ..	1,370	1,388	1,123

Carloads of grain arriving at tide-water for export during the first six months totaled 18,746 compared with 29,055 in the same period last year, a decrease of 35.5%. Cars of grain unloaded in June totaled 3,255 compared with 6,504 last year, a 50% drop.

Canadian Wheat Acreage Sharply Increased

The 1944 wheat acreage of Canada shows a sharp increase not only over that of 1943 but also over earlier estimates—based on farmers' intentions to plant, according to USDA. The first official estimate places seedings in the three Prairie Provinces at 23,100,000 acres, compared with 16,700,000 last year, an increase of 37.8%. These Provinces normally account for about 95% of the country's total wheat area.

The expansion of 6,400,000 acres in Canada's 1944 wheat acreage marks a reversal of the Dominion's wheat policy thus far during the war.

Half Billion Carry-over Predicted

U.S.A. 1944-45 supplies of wheat, which will probably exceed 1,500 million bus., should be sufficient not only to meet all needs for the fiscal year beginning July 1, but also should provide substantial carryover as protection against possibility of shorter supplies in 1945-46, according to WFA.

To enable fulfillment of these 2-yr. needs, WFA is allocating this year's wheat supply, even though the current domestic crop outlook for 1944 is the best in history. (The largest previous harvest, in 1915, slightly exceeded 1 billion bus.)

About 11% of the supply—118 million bus. has been allocated to U.S. military and war services, and to our allies, territories and other friendly nations. The allocation for industrial uses will take another 118 million bus. for industrial alcohol, and about 3 million bus. for paper sizing and similar industrial uses. About 65 million bus. will be allocated for the relief of liberated areas.

A balance of about 435 million bus. will represent a possible carry-over for July 1, 1945. This may be reduced by larger uses for feed than now indicated, but it appears feed needs will begin declining during the year.

200,000,000 Bu. Shipped

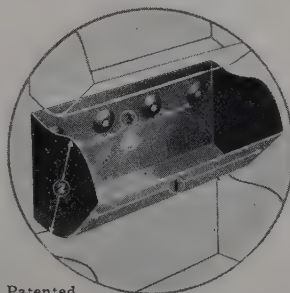
200,000,000 bu. Canadian wheat was shipped into the U. S. from Aug. 1, '43 to July 6th; oats shipments totaled 63,500,000 bu., and barley 28,000,000 bu. for the same period.

150,000,000 Wheat for China

Chinese agricultural experts state China will need 150,000,000 bus. wheat from abroad in the first year after the war.

IS YOUR BUCKET ELEVATOR READY FOR THE EXPECTED GRAIN RUSH!

Now is the time to install



Patented

Write for Capacity Analysis Form No. 76, which will enable us to make guaranteed recommendations.



Be ready to handle any volume efficiently—faster and render better service.

Here's what the design features of "Nu-Hy" Buckets do for you.

1. The high lip (high front) is scientifically positioned to scoop up a full load . . . retain it and avoid premature discharge at head pulley.
2. The high ends (high sides) are shaped to fit contour of adjoining buckets on belt—reducing gaps between buckets . . . prevent spillage in up leg and over head pulleys.
3. The bolt hole position avoids "hinging" action when bucket passes over boot and head pulleys . . . directs pick-up and discharge. Bolt hole indentations act as lock nut, embed belt and bolt head to improve traction.

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ENGINEERS MANUFACTURERS
TRADE MARK REG. U.S. PAT. OFF.

Processing Smutty Wheat

By ROBERT G. HUNT, Tacoma

His hobby is wheat washing. But he is equally adept at washing barley, oats, and anything else needing the professional touch of an enthusiast. "On the Pacific Coast a terminal cannot afford to be without one or more washers. They are life savers, as practically 30% or better of the wheat arrivals carry smut dockage of 0.5 to 4½% on the average. But it ruins any profit when scouring is necessary," he tells you here, among other poignant pointers.

THERE is no business involving so much hazard with so little compensation as the grain business, taken as a whole. These are indeed times when terminal elevator operators and grain men should be in counsel with their own individual minds, taking nobody's guess that certain things can't be done—or err by dismissing some thought or idea as trivial that would prove to be a vital and important factor if given careful consideration before casting into the discard as unworkable. Perhaps some worthy competitor is already reaping a margin of profit or saving on your same problem or idea.

It stands all elevator operators well in hand to have the protection of modern cleaning equipment and use such machinery in a way that a profit is shown rather than a loss to absorb; not only strive to make the margin of profit but save the dollar you already have. Considerable thought is being given with regard to smutty wheat and how best to dispose of it. There is only one safe answer, and that is by PROPER WASHING.

Can Boost Test Weight

IT is an accepted fact with all varieties of wheat that the large percent grading smutty, or is assessed with smut dockage, is of high milling quality—so why not preserve it in this classification of quality by the proper processing to remove the smut and not destroy or impair the milling value, either domestic or foreign?

On practically all smutty wheat the test weight can be consistently increased 0.5 to 2 pounds per bushel by washing, thus increasing the value per bushel, building up a vital grading factor and leaving the wheat in a clean and healthy condition—with no field dirt, no crease dirt or sweating impurities, no dormant fungi so injurious for safe storage, no germ ends destroyed, nor brush ends laid bare.

These prime factors so essential in building up good grades of wheat, preserving milling qualities and en-

hancing safety for storing, positively cannot be obtained by the process of scouring. First, the miller is hands up against scoured wheat, and justly so. Cracked and broken kernels not only are partially lost into mill feed, but give uneven temper going to mill rolls. The same is true where the germ is broken or scoured away.

Second, lime or plaster is invariably used as a medium of absorbing smut as well as a medium of scouring. This is common practice and while perhaps the smut has been removed even by scouring the second and third time, you not only still have the crease dirt, etc., but have added scouring compound to the berry which is detrimental to reflecting the true test weight per bushel.

Third, the power factor on scouring runs up 3½ and 4½ to 1 as against washing. The cost of water is nothing as compared with the cost of lime or plaster. Fourth, the burden of the invisible loss on scouring is ruinous.

MASSING FOR A GRAND SCALE OFFENSIVE?



Courtesy Chicago Daily News.

None Complete Without One

NO terminal grain elevator is complete without at least one up-to-date wheat washer. New features have recently been added in the design and construction of these machines and are superior to the older types. Further, the Federal Grain Inspection Department of the USDA recommends the washing of smutty wheat in preference to the using of lime or plaster.

It is reported that some elevator operators wash clean wheat for the mere gain in water absorption. There is really nothing to be gained by washing clean, healthy wheat; in fact, no up-to-date elevator or grain man will attempt to do so. It is truly unfortunate that anyone would resort to any such practice.

The writer, however, maintains there is real honor among the men of the grain industry, and trusts that little credulence can be given to the report. With some Pacific Coast varieties of wheat it is not impossible to add 1.5 to 2 pounds per bushel in test weight as a regular procedure, with a minimum amount of added moisture—often as low as 0.6 per cent.

The least moisture added, the better, as moisture in excess to normal reduces the test weight per bushel, which is the chief goal to consider and strive for as it holds the largest profit. It is an easy matter to forfeit a grade by adding too much water, and the extra moisture will not compensate for the discount on the lower grade.

It would be impossible to lay down any fixed or iron-clad rules in operating a wheat washer, as there are several factors to consider, viz., the variety of wheat, percentage of smut, original moisture and test weight. One rule however that will always hold true with all washing is to have its operation supervised by the best men on the job—hit and miss is not so good—and don't let the other fellow do a better job than you can.

[It may be interesting information that many large chicken ranchers who are careful and particular with regard to feeding, insist on washed wheat when making their purchases.]

Jete Yet?

Waitress: "I'll Russia to a table and Fiji fast. Japan the menu yet? The Turkey is Nice."

First Customer: "Okay—Turkey and I Bolivia. I'll put a Cuba sugar in my Java."

Waitress: "Sweden it yourself. I'm only here to Serbia."

First Customer: "Don't Genoa customer is always right? What's got India? You think arguing Alps business?"

Second Customer: "Canada racket. 'Spain in the neck."

You'll forget how you spent it; but you'll know you don't have it . . . Buy War Bonds and hold them.

Wage Incentive Plans Next?

Harold Wilber raised the point in the last issue of "GRAIN," asking for advice from those having experience with wage incentive plans.

John W. Nickerson, WPB management consultant division director, states voluntary wage incentive plans adopted in 86 plants in the Chicago war labor board area increased productivity an average of 45% in 90 days. He told the Massachusetts Institute of Labor that the incentive systems increased earnings of workers 19%, while labor costs decreased 14%.

Howard C. Greer, vice president and general manager of Kingan & Co., Indianapolis, predicts wide acceptance of recognized, but untested labor incentives, such as a work day or week based on the number of units produced, instead of hours worked, and a fixed weekly or annual minimum wage. "These incentives and others should be considered now because high production levels must be maintained after the war to meet the higher pay rolls which workers will continue to demand," he told the National Association of Cost Accountants.

"The only way to keep wages high is through high production which in turn demands labor incentives. A good incentive plan should be so developed that the emphasis can be shifted to letting workers go home earlier, instead of staying to turn out more work, if his desires and the circumstances of the business warrant this. Some plants operate on this basis now. Establishing a fixed minimum wage instead of hiring workers by the hour or piecework rates could become a powerful incentive for greater cooperation by workers in aiding the plans of the management.

"I suggest here merely that this change probably is coming and cost accounting had better be ready for it. What we hope to do is retain the advantages of private enterprise and individual freedom and eliminate as many of their disadvantages as possible. Unless this can be accomplished, private enterprise and individual freedom may not survive," he warned.

For Help on Incentive Plan

For help on working out incentive plans which will stand up in face of WLB's Little Steel wage ceiling, write Management Consultant Division, War Production Board, Washington 25, D.C.

A recent survey in the foundry field reveals that 20 plants adopting incentive wage plans raised output 42%, workers earnings 18%, and decreased unit labor costs 12%.

The line between failure and success is so fine that we scarcely know when we pass it—so fine that we are often on the line and do not know it.
—Elbert Hubbard.

World Wheat Stocks Show Decline

Wheat stocks in the four principal exporting countries in the world are estimated to have about 575 million bus. below the record supplies on July 1st, a year ago, according to USDA.

Total stocks were placed at 1,170 million bus., compared with 1,748 million last year and with the average of 457 million for the 5 pre-war years 1935-39. The decline of nearly one-third from a year ago is the greatest change in carry-over supplies in one year's time on record. It resulted in part from the smaller 1943 wheat harvest in the four countries and in part from the extraordinary demand for wheat for non-food purposes.

Virtually all of the decline occurred in North America, where it was about equally divided between Canada and the United States. In the U.S. the apparent disappearance during the 1943-44 season exceeded production by more than 400 million bus. This not only reduced U.S. stocks but also drew heavily upon those in Canada. Domestic disappearance in Canada was expected to reach the record figure of 191 million bushels, largely as a result of increased feeding.

Career Women

There are more than 1,000 women in the United States who have taken up law. There are several million other women who lay it down.

June Corn Grind Up

Corn ground for domestic consumption during June by eleven refiners totaled 9,086,719 bu, as compared with 9,022,945 the month before and 8,735,981 bu a year ago.

New Seedburo Yearbook Out

Seedburo Equipment Company's Year Book has just come from the press and is available for the asking simply by addressing your request to 223 W. Jackson Blvd., Chicago 6. Containing more helpful items (350) than any previous issue, this Yearbook adds such new products as static eliminators, temperature taking sets, magnifocuser, Tehr-Greeze fabric cement, portable blowers, sack balers, hand tackers, unit sack cleaners, bag and platform trucks, feeder - scalper - magnetic separators, scoops, carbon dioxide extinguishers, etc.

One section gives a summary of the official USDA instructions on grading grain written in every day, easy-to-follow language, designed to be useful as a reference book for those concerned with the grading of grain. Many other pointers can be picked up from perusing this text.

Good Care

I hope you are taking good care of your cold.

You bet I am. I've had it over a week and it's just as good as new.

GIMME THAT GUN!

The Guy Who Lent Us The Money For This Rifle Wants It Back!

Joe Doaks was planning to cash his War Bonds to take a vacation. He changed his mind because of this dream—

It seems he was in the Army in a fox hole surrounded by Japs. In the midst of picking them off one by one, a sergeant tapped him on the back and took his rifle away. "What's the idea, Sarge?" he asked. "The guy who lent us the money for this rifle wants it back", was the answer.

ADDRESSOGRAPH-MULTIGRAPH CORPORATION CLEVELAND, OHIO

BUY BONDS KEEP THEM

Interest in Smaller Plants

One company reports good results from a unique safety committee system. A detailed write-up is supplied by the correspondent, which set-up provides for three safety committees.

A WORKERS' COMMITTEE—Membership rotated regularly to get all employes on the committee. Act as inspectors and safety monitors in their own department.

A FOREMEN'S COMMITTEE—Pass on recommendations from Workers' Committee—also make their own.

A SUPERINTENDENTS' COMMITTEE—The master committee that makes final decisions.

One secretary serves all three com-

mittees and the minutes of all meetings are read at all meetings.—George Steel.

Pinned Beneath Rail Door

A strong gust of wind tore the track shed door from the grasp of the three employes who were closing it and pinned Frank Henson, 49, between same and the door frame of the Loveland Elevator at Missouri Valley, Ia. Removed to the hospital at Council Bluffs, the injured was found to have suffered a broken pelvis, fractured hip, and two fractured vertebrae. His condition is reported as serious.

You Never Can Tell

Most all of us will expose ourselves to the direct rays of Old Sol while away from work, on holidays and over the week-ends of the approaching summer in all sorts of pleasant activities. And unless we're careful Old Sol will assuredly make a grab for us as he snatches more than his share of sunstroke and heat exhaustion victims again this season.

Three of five typical cases which came to the attention of the National Safety Council averaged 17 days lost time from this cause. This interesting tabulation gives you the age, temperature and time of day the victims succumbed:

Case 1, age 44, 71° F., 4:00 P. M.

Case 2, age 29, 83° F., 4:30 P. M.

Case 3, age 29, 81° F., 1:15 P. M.

Case 4, age 61, 90° F., 2:50 P. M.

Case 5, age 28, 78° F., 1:10 P. M.

Obviously the young and old can be—yes, ARE—affected. And the experience of the National Safety Council indicates that the good ol' afternoon sun takes the largest toll of victims. The above tabulation, likewise proves that moderate temperatures have as strong an effect as the much higher figures.

Protective clothing and headwear should always be worn whenever you are going to be in the sun's rays very long.

Ice in your drinking water is absolutely taboo. Salt tablets mixed with Dextrose are truly essential.

Watch out, ol' Pal, that you're not next! Why take a chance?

BOUQUET FOR COMMITTEE

By its brilliant work during the past several years, the Safety Committee of the SOGES has come to paraphrase the meaning of the initials of our Society into "Safety Observance Gives Economic Satisfaction."

The value of a man has been computed at \$50,000.00. Under the regime of the Safety Committee there has been but a single fatal accident in the plants inscribed upon the rolls of the Contest. Outside the fold there have been . . . ? . . . fatalities to workers in grain elevators.

Economic satisfaction? Yes! And the deeper satisfaction that human lives have been safeguarded and homes kept happy by unceasing diligence in Safety control.

The following Roster composes the men who head this vital work. It is their wish that each and everyone of us do our part in making the coming year entirely free from the unmitigated horror of Accident.

Learned a Lot

I am sure the convention delegates learned a lot of real value to them. I know I always have.—L. C. Irwin, Superintendent, Searle Grain Co., Ltd., Fort William.

DUST CONTROL is IMPORTANT!

SEVERAL recent serious dust explosions in the grain and milling industry have again directed attention to the wisdom and economy of efficient dust control. Compared with the losses suffered in these explosions, the cost of dust control installations is very small indeed.

Let DAY figure on your complete DUST CONTROL SYSTEM

DAY facilities include engineering, fabrication and installation of entire system—including Dual-Clone Dust Collectors, pipings, fittings, dust tanks and all other sheet metal work of standard or special nature—big or small.

DAY DUAL-CLONE DUST COLLECTORS

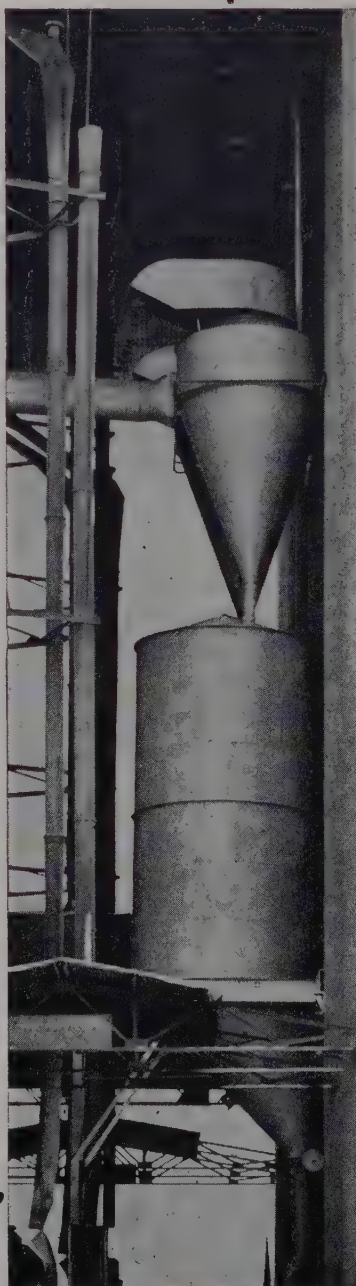
This patented DAY development—with its low resistance and high separating efficiency—is the key to the uniformly successful operation of DAY DUST CONTROL Systems. Its compact design saves space and greatly simplifies installation.

Important information for you in our booklet "DAY DUST CONTROL." Write for a copy.

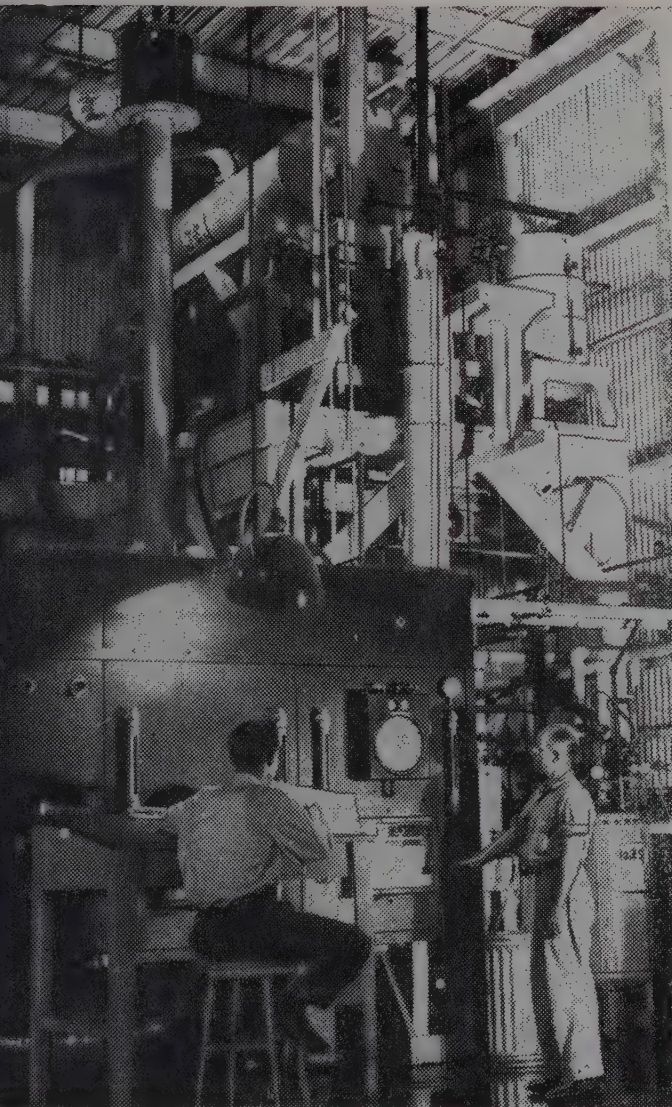
The DAY Company

814 Third Ave. NE. Minneapolis 13, Minn.
In Canada—The DAY Co. of Canada, Ltd.

One of the many types of DAY installations at a grain elevator. The dust is discharged directly from the dust tank into box car below.



"Grain" Tires in the Making



LAWRENCEBURG, Ind.—Butanediol—a product half way between grain and butadiene, vital raw material of synthetic rubber—comes out of this futuristic apparatus in a corner of Schenley Distillers corporation's recently-completed butadiene pilot plant here. In this pilot plant, butadiene is produced by a new short-cut process that eliminates distillation of alcohol as a step in making butadiene from grain for synthetic rubber. All of the corporation's grain distillation equipment is devoted 100 per cent to production of industrial alcohol for war purposes.



These workmen cut up aged tanks which served the hydraulic elevator system. Similar outmoded tanks in mills and factories can add to the tank armies needed to swamp the Nazis and Japs.

SWAP - RIMES

by Gregg & Downey



Mary had a little car -
No bigger than a minute,
But when she joined the Swap-Ride club
She got six people in it !

SWAP RIDES

SAVE GAS ★ SAVE TIRES ★ DRIVE CAREFULLY!

NATIONAL SAFETY COUNCIL



HENRY
BOLTINOFF
ASNC FOR OWI

V-8

Maybe You're
MISSING
SOMETHING?!

But until You **TRY**
C.C.C. — GRAIN
and
MILL FUMIGANTS

You'll Never Know
HOW MUCH!

Ask Your Neighbor
Get Our Facts and Figures
Give C.C.C. Products a Trial Today

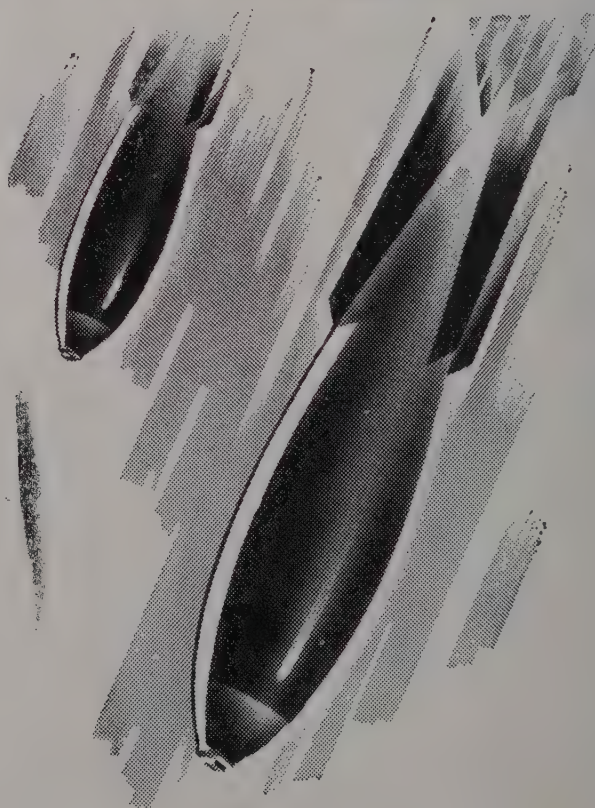
Order from

COOK CHEMICAL CO.

2020 Wyandotte

Kansas City, Mo.

DELAYING THE VICTORY HOUR



Responsibility Needs *AUTHORITY*

By C. GIBSON FRANKS, Chicago

Author, Safety Enthusiast, Cartoonist, Barleyist

ALL employers demand that their help, both supervisory and general, be of a responsible nature and able to take full responsibility for their particular jobs. This is, of course, not only desirable but absolutely necessary. Those in minor supervisory positions, just as those in the top positions, must know their jobs thoroughly and carry the responsibility for the results obtained.

There are, however, several qualifying requirements which go hand in hand with the minor executive's ability to make a success of his job.

In any organization one of the first requirements must be a spirit of co-

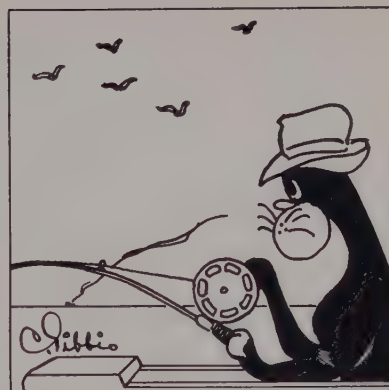


Snooper, The Boiler-Room Cat, says: Let's Step In There Swinging, Boys, and Bat Out a New Record For Safety.—C. Gibson Franks.

Dalliance Results

AN assistant or foreman charged with the responsibility for certain work or workers must have full authority to use his own judgment in the pursuance of that work or the application of those workers. Supervision which keeps all authority in its own hands is responsible to a large degree for any dalliance in time schedules or lack of efficiency in production.

The degree of authority which the minor executive is permitted to free-



Snooper, The Boiler-Room Cat, says: Getting Results From Your Safety Program Requires The Same Perseverance and Patience That Gets the Big Ones in Fishing.

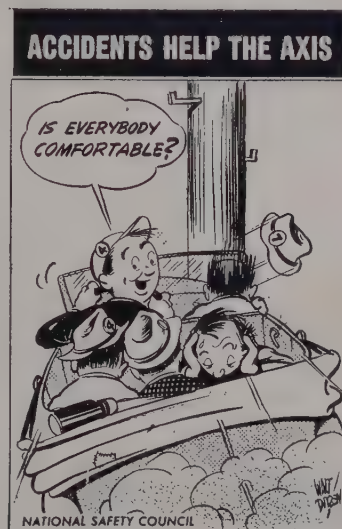
ly exercise determines to a large extent his value in the plant. Naturally the man must have the ability and intelligence to effectively carry out his duties but if he is hampered by too tight a reign on his exercise of his own judgment he will never prove to be of the value to the employer that he should.

The amount of work and attention to minor details that the minor executive can save his superiors is, after



operation among the different departments. This does not mean that there can not be differences of opinion. Various approaches to problems are desirable but surely they can be resolved in a spirit of genuine cooperation among the different executives.

Perhaps the most important factor in the success of the junior executive and junior supervisor is the amount of authority delegated to him by his supervisors. If his authority is not commensurate with his responsibility it is unfair to hold him alone to blame for any failure. Where delegations of authority are withheld and the minor supervisor is forced into the position of a glorified messenger boy, his value as an executive is destroyed.



all, the determining factor in his value to the firm.

In this light, employers, review your position and see if you hold back in the delegation of authority to your assistants. You'll find a new freedom from minor worries and cares and new time for your own executive duties if you can loosen your hold on authority to the degree that you hold your minor supervisors responsible.

Buggy Tips On Him

Painful leg injuries were inflicted on Chris Steinwandt when a concrete buggy tipped over on him at General Mills' soybean plant at Belmond, Ia.



"IT'S STUFFED - OUR SECURITY MODEL"

\$1 Yr Man Get Deducts

P. A. Singer, a director of Allied Mills, Inc., Peoria, head of the soybean division and active in the company's construction activities, is a \$1 a year man for Uncle Sam. He just got his pay check for six months, but it wasn't for 50c. No, Uncle Samuel had deducted 3c for unemployment insurance, explaining that inasmuch as this deduction should be 5% his next check would only have 2c subtracted. Mr. Singer is now assured that should he ever be unemployed he will not need to worry, he's all set for life.

Training Just as Important

Pre-formed wire rope to eliminate "loops" in car-shovel cable may be part of the answer for eliminating such leg and foot injuries and losses as were previously reported in "GRAIN," but the consensus of opinion of the Grain, Feed and Flour Committee, Food Section, National Safety Council, is that all employees should be trained to stay from between the pulley and the shovel.—George Steel, Chairman.



"I'VE BROUGHT SOME MORE BOOM...BOOM. BANG!"

Not Allowed Between Drum and Shovel

Only way to keep workmen from stepping into car shovel rope loop is to enforce the rule that no one be allowed between the shovel and the drum or sheave.—Frank Booz, Albers Milling Co., Los Angeles.

Safest Grain Door Remover

In answer to last month's query on the safest way to remove grain doors, (1) one company is happy with a hand powered hydraulic jack, (2) another has installed a heavy hydraulic jack that is swung in place with a chain block and an air valve opened to do the job, (3) another has installed an electric chain hoist by the door. A bar is driven between the doors and the hoist hooked on right next to the door. A push of the button does the job, and (4) another has a mechanical jack rigged up to the power shovel ropes that works between the grain door and a "V" track alongside the plant.—George Steel, Food Section, National Safety Council.

On Opening Bags

A knife with a short blade—not over 1½ in., a blunt scissors for machine sewed bags (as point is needed for hand-stitched ones), or a knife made out of a file with a hook like a shoe hook on the end and sharpened on the inner side, were claimed to be the best means of opening bags, according to those answering our questionnaire.—George H. Steel.

Beam Gives Way

Critical injuries were suffered by Harley McCann when a steel beam at General Mills' soybean plant at Belmond, Ia., gave way under the concrete third floor, causing him to fall to the second floor.

"Man Working" Sign Hung

When anyone is working on a belt there should always be a "Man Working" sign hung on the starter. As a further precaution against accidents if the belt is okay for service and it is not in motion, before it is thrown in the man who is going to throw the belt in should first apply enough current to the motor to move the belt about six or eight inches so if there is anyone on or near the belt he will know same is going into service and will get in the clear.—Frank A. Peterson, New Jersey Flour Mills Co., Clifton, N. J.

Hat's in the Ring

Want to hereby serve notice to the other contestants in the Society's Safety Contest that we're throwing our hat in the ring for highest honors. We're definitely in there pitching.—Bob Lare, Butler-Welsh Grain Co., Nebraska City, Neb.



"LOOK, DEAR, THE JONESES ARE NEGLECTING THEIR VICTORY GARDEN—HERE ARE THOSE PEAVINES AGAIN!"

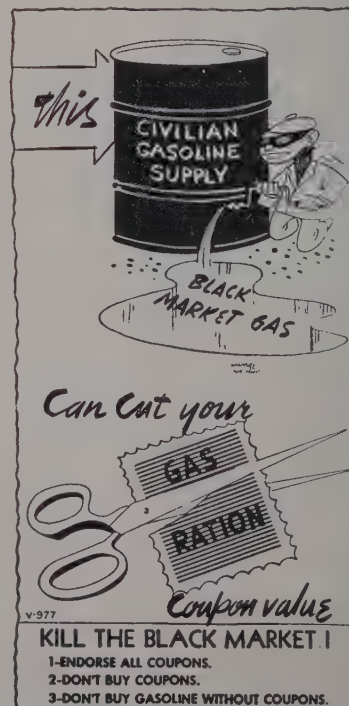
Guard for Car Movers

A 3/16th inch plate three inches long across the handle a few inches from the end of the car mover—so the user's knuckles won't get bruised against the rail in case the mover slips—is a safety idea that will save many skinned knuckles.—George Steel.

Safety Trophies in Daily Press

Charles F. Walker and Harry W. Siebert of Archer-Daniels' Council Bluffs plant were pictured recently in the daily newspaper along with the safety trophies recently won. Harry Siebert is chairman of the plant's safety committee.

Any reason you can give for cashing in War Bonds will please Hitler.





A VOLCANO IS A **GENTLEMAN** COMPARED WITH A DUST EXPLOSION

. . . it rumbles and grumbles before it erupts; signifies its intentions. But a Dust Explosion! Crash! Bang!! And there it is! Flames, fumes, tottering walls . . . no advance "tip-off."

Dust explosion hazards can be minimized, however, with ROBERTSON SAFETY VENTILATORS.

Here's how. Nine out of every ten Dust Explosions originate in elevator *leg*. Disperse the blast and there can be little or *no destruction*.

And that's precisely what Robertson Safety Ventilators do, effectively . . . *economically*, too, venting dangerous suspended fine dust continuously by gravity action; no operating cost.

For argument's sake, suppose an explosion should start. It is routed out *through* your Robertson vent, which has a safety top, instead of ripping up the building with primary and *secondary* explosions.

For dependable *protection* and downright *peace of mind*, investigate. Write for descriptive literature.

H. H. **ROBERTSON** CO.

FORSELL, MacIVER, AULD TOPS IN MEMBERSHIP CONTEST

Lloyd Forsell, Chicago, Cliff MacIver and Jim Auld, Minneapolis, finished the perennial SOGES new membership contest on top of the list of 26 contestants, according to reports from Harold Wilber, SOGES Vice President in charge of this activity last period. Mr. MacIver was elected chairman at the recent SOGES convention to conduct the new membership contest for the coming year—in addition to his responsibilities as president of the Minneapolis Chapter, and big things are expected.

The past period resulted in the following standings:

- 16 Lloyd Forsell, Chicago
- 9 Cliff MacIver, Minneapolis
- 7 James Auld, Minneapolis
- 4 Jim Kier, Toledo
- 4 Gil Lane, Chicago
- 3 Harold Wilber, Decatur
- 3 Herb Brand, Cedar Rapids
- 2 Fred Myers, Indianapolis
- 2 Andrew Rankine, Montreal
- 2 Ben Danielson, Chicago
- 2 Gordon Laugen, Chicago
- 2 John Goetzinger, Omaha
- 1 Frank Jost, Chicago
- 1 R. J. Lane, Jersey City
- 1 Ralph Wilson, Chicago
- 1 Emil Buelens, Chicago
- 1 John Long, Chicago
- 1 Fred Sibbald, Fort William
- 1 Maynard Losie, Minneapolis
- 1 E. R. Anderson, Chicago
- 1 William A. Thomson, Louisville
- 1 Frank E. "Slim" Carlson, Chicago
- 1 Paul Christensen, Minneapolis
- 1 E. J. Martin, Norfolk, Va.
- 1 Sidney I. Cole, Chicago
- 1 Fred Melberg, Chicago

Chicago Has 91 Members

Chicago topped the list of SOGES chapters in gains made during the past year, according to Gordon E. Laugen, Archer-Daniels-Midland Co., retiring Chapter President, for a total of 91 members. "That may seem like a lot considering the number of grain handling and grain processing plants we have here," he said, "but it must be remembered that we have a majority of the Associate Members that serve the country in the capacity of experts. Furthermore we have the value of being 15 years old here and that counts for something. In addition we have one, two or three members from each grain handling or processing plant—even though Chicago's storage capacity is not up among the top ranking markets."

"And let me add my bit to this," insists President-Elect Steve Halac, Glidden Co. "While we now have almost one-fourth of the SOGES membership in Chicago—something new for us—we have no intention of yielding our position. We not only feel that we can keep in the lead in the way of new desirable members but we challenge the other SOGES units to outdo us in the way of worth-while programs and accomplishments. That may sound like wishful thinking to some, but the proof of the pudding is in the final results, measurable a year hence."

"After a careful study of the situation," adds Leonard Danielson, Chicago Chapter Vice President, "we know full well that some of the other

groups within the SOGES have an opportunity of running us a merry chase. It has been a struggle to stay ahead of the Minneapolis crowd and we anticipate that the competition will not diminish, however, if we keep our 'eye on the ball' they won't catch us napping too often. And from looking at the results we can see that there has been and is going to be continued competition for gains between other units of our growing body."

"The growth and strength of our association is not necessarily based upon chapter gains," opines Lloyd Forsell, another Chicago Chapter Vice President. "Our technical body started out with representatives throughout the continent—and we hope this situation never changes. It will be noticed that while the gains among the chapters is encouraging, so is that among those not located in chapter cities."

"And right here let's understand one another on one point. That is that if any group of SOGES members wants to start a Chapter that we'll all pitch in and help. We will not, however, attempt to move in and start chapters unless we are requested to help in doing so. Those of us who have partaken of the benefits to be gained from chapter activities would not wish to do without this monthly stimulation. We'd feel lost without the continuous array of discussions, et al. So would the other chapters, I know. And if you want to launch a similar endeavor and are willing to expend the time and effort to get it under way we know you, too, can

reap untold gains therefrom," new-membership champion Forsell concludes.

Chapter gains in new membership for the last SOGES year are:

- 30—Chicago
- 24—Non-Chapter
- 15—Minneapolis
- 3—Kansas City
- 1—Ft. William-Pt. Arthur
- 1—Omaha-Council Bluffs

Jim Kier Feted

A dinner in honor of Jim Kier, newly appointed manager of National Milling division of National Biscuit Co., was tendered him by the members of the Toledo Board of Trade at the Maumee River Yacht Club on July 14th.

All Out

Clancy got a job at a railway station. When the first train came in, however, he forgot the name of the station; so he called out: "Here ye are for where ye're going. All in there for here, come out!"

Omaha Meeting in September

The Omaha-Council Bluffs SOGES Chapter will resume its monthly meetings—after a brief summer respite—in September . . . Our July meeting was a good one. In addition to our regular members we had the pleasure and honor of having past-president Paul Christensen of Minneapolis with us. We who were at the convention gave a report to those that were not there. That brought up the subject of mechanical unloading and we discussed the several different kinds that were talked about at the convention.

We had a report of a meeting held by Mr. William Parkinson, Area Director of WMC. He gave a very good account of himself and what they are trying to do, and said if this does not work that Selective Service would be in order.

A special committee was appointed for our Fall activity, including Herb Sales, John Goetzinger, Jerry Lacy and Vince Blum. Believe they will bring in a progressive report.—Charles F. Walker, Archer-Daniels-Midland Co., Chapter President.

George A. Cole Appointed

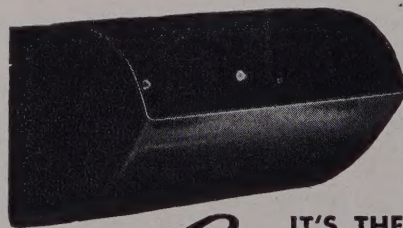
George A. Cole, formerly a traffic lieutenant of the Holland Tunnel police, was named superintendent of the Brooklyn Grain Terminal operated by the Port of New York Authority. He succeeds James A. Flinn. D. K. Milligan is assistant.

Don Burke Succeeds Vern Clark

Donald Burke succeeds Verner Clark as Super at the Nebraska Consolidated elevator in Omaha. Vern recently left for California.

Chicago Visitors

Jim Auld, Minneapolis SOGES Chapter Secretary, and George Patchin, Appraisal Service Co., were Chicago visitors recently.



Weller
Pat. No.
1,944,932

IT'S THE
Curve
THAT COUNTS

No other elevator bucket in the world can give you Calumet results . . . because no other bucket is designed with a logarithmic curve construction. An exclusive, patented and proven feature that ups capacity from 10% to 100%. Investigate! Write for form 35 . . . learn how much greater guaranteed capacity you can get from your elevator legs.

B. I. WELLER CO.

327 S. La Salle St.

Chicago 4, Ill.

CALUMET SUPER CAPACITY ELEVATOR **CUP**

Forty-Nine New Members Join

Forty-nine new members joined the Superintendents' Society between the close of last year's convention and the close of this year's conference. In addition a total of sixteen renewed their memberships, for a total of 65—an excellent gain, according to SOGES executives. Recent new members of which the Superintendents' Society is mighty proud, include:

- 579 Ray M. Seeker, Anheuser-Busch, Inc., St. Louis.
- 580 Chester Hammerstein, Anheuser-Busch, Inc., St. Louis.
- 581 Clyde W. Clark, Anheuser-Busch, Inc., Springfield, Mo.
- 582 Louis Harff, International Milling Co., St. Louis Park, Minn.
- 583 Glen E. McKinnon, Archer-Daniels-Midland Co., St. Louis Park, Minn.
- 584 Abraham Tyler, Fleischmann Malting Co., Chicago.
- 585 Conrad Erickson, Three Rivers (Que.) Grain & Elevator Co., Ltd.
- 586 Lorrett S. Hover, Thomson Grain Elevator Co., Louisville.
- 587 T. A. Strid, Strid Grain Co., Green Bay, Wis.
- 588 Fred Keeney, Allied Mills, Inc., Portsmouth, Va.
- 589 G. G. Richards, Imperial Belting Co., Kirkwood, Mo.
- 590 H. J. Mellen, M. W. Kellogg Co., Chicago
- 591 Frank D. Dennis, Archer-Daniels-Midland Co., Chicago
- 592 Fred Green, Farm Bureau Milling Co., Hammond
- 593 George A. Cole, Port of New York Authority Grain Terminal, Brooklyn, N. Y.
- 594 Leon Chevallet, Spencer Kellogg & Sons, Inc., Chicago
- 595 Dewey H. Hagman, Archer-Daniels-Midland Co., Minneapolis
- 596 W. Dean Keefer, Lumbermens Mutual Casualty Co., Chicago
- 597 Felix M. Schwandner, Great Lakes Elevator Corp., Chicago

Reinstatements; Transfers

- 52 W. S. Pool Jr., Nebraska-Iowa Grain Co., Omaha
- 406 Ralph A. Wilson, Industrial Erectors, Inc., Chicago
- 593 D. K. Milligan to George A. Cole, Port of New York Authority Grain Terminal, Brooklyn
- 368 Verner Clark to Donald Burke, Nebraska Consolidated Mills Co., Omaha

Real Pleased

Was real pleased to learn that the convention was such a success. Had a letter from Ken Miller of West St. Johns and he surely gave me a glowing account of this important event. I am so pleased that he was there.

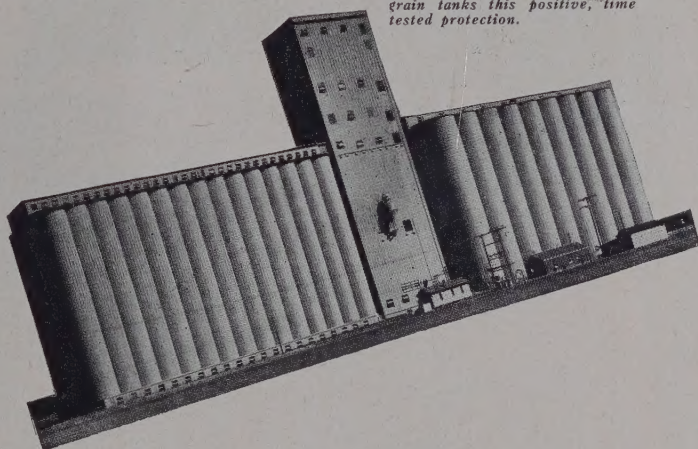
As I've said before, my one regret is that more Canadians do not become active members of SOGES. There is such a lot that can be learned.—Jim Shaw, Port McNicoll.

4 FOR MORE PROTECTION



Against Water and Waste

One of the scores of elevators that FOUR coats of In-Fil-Tro-Flex have made water-tight for years to come. Give YOUR grain tanks this positive, time tested protection.



NOT one, not two, not three, but **FOUR** coats of weatherproofing material are applied in resurfacing an elevator, when the B. J. Many Company does the job.

Yes, *four* complete coats of chemically compounded, gun-applied In-Fil-Tro-Flex. Coat upon coat of enduring protection. All pores, all cracks securely sealed. Every inch of surface made absolutely water-tight . . . made to stay that way because

In-Fil-Tro-Flex

weather-proofing stays put. Adheres with bull-dog tenacity. Extremely elastic . . . g-i-v-e-s with movement . . . keeps cracks bridged.

A B. J. Many Company job costs more, it's worth more; it lasts longer . . . and that's what counts. Cheap materials and faulty workmanship represent false economy.

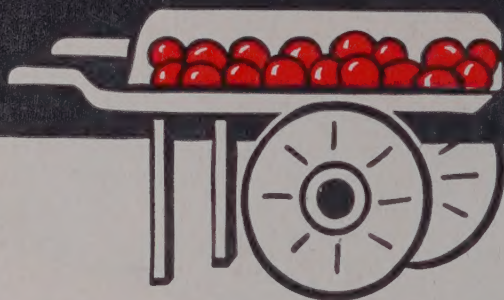
Include this better weatherproofing and restoration in your post war planning. Write

B. J. MANY CO.
30 N. LA SALLE ST. CHICAGO, ILL.

213 STATE ST., DETROIT, MICH.

BALTIMORE (MD.) LIFE BUILDING

- Weevil-Cide leaves no odor or other bad effect on grain.
- Safe and convenient to apply.
- Possesses great killing power and stability of formula.
- Involves no fire hazard.
- Lowest in unit cost per bushel for actual results.
- Truly economical.



Why

"UPSET THE APPLE CART?"



The grain trade continues *using* Weevil-Cide, season after season, because this dependable fumigant *continuously* meets *every* fumigation requirement.

... so why experiment with unproven products?

THE *Weevil-Cide* **COMPANY**
 THE DEPENDABLE GRAIN FUMIGANT
 1110 HICKORY STREET
 KANSAS CITY, MO.



CHOICE OF THE GRAIN TRADE